

UNIVERSAL
LIBRARY

OU_164267

UNIVERSAL
LIBRARY

OSMANIA UNIVERSITY LIBRARY

Call No. *639/M88F* Accession No. *3433*

Author *Moreton & Hunter*

Title *Fisheries Manual*

This book should be returned on or before the date *1948*
last marked below.

By the same author

FISHERMAN'S KNOTS AND WRINKLES

Fourth edition. Fully illustrated.

KNOTS, SPLICES, WIRE FASTEN-
INGS, Etc.

NET MAKING.

SIMPLE FLY TYING.

FISH MODELLING IN PLASTER.

WRINKLES FOR ANGLERS.

"A most useful little book . . . contains
information not to be found between the
covers of any other book."

The Fishing Gazette.

Published by A. & C. BLACK LTD.
4, 5 & 6 SOHO SQUARE, LONDON, W. 1

FISHERMAN'S MANUAL

FISH AND HOW TO CATCH THEM

BY
J. P. MORETON

AND
W. A. HUNTER

*Author of "Fisherman's Knots and Wrinkles,"
and "The Romance of Fish Life,"
Editor of "Fisherman's Pie."*

A. & C. BLACK LTD.,
4, 5 & 6 SOHO SQUARE, LONDON, W.1

Published June, 1932

Reprinted 1942

Reprinted 1945

*Printed in Great Britain by
Billing and Sons Ltd., Guildford and Esher*

PREFACE

MOST of the chapters in this book were originally issued as pamphlets with the object of assisting beginners to make a start at the sport and avoid many mistakes incidental to lack of experience.

The demand for copies, however, was such that two large issues were quickly exhausted ; so we decided to make some additions of our own, to incorporate suggestions offered by experienced fishermen, and then to publish the whole in this handy pocket form.

We are indebted to Mr. C. V. Hancock for kindly reading the proofs.

J.P.M.
W.A.H.

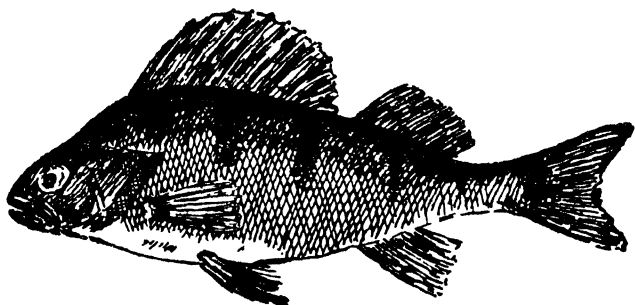
Birmingham, June, 1932.

CONTENTS

| | PAGE |
|--|------|
| I. PERCH | 9 |
| II. PIKE | 15 |
| III. ROACH | 27 |
| IV. GRAYLING | 38 |
| V. SPRING SALMON | 45 |
| VI. TROUT | 57 |
| VII. SUMMER SALMON AND SEA-TROUT . . . | 70 |
| VIII. CHUB, BREAM, DACE AND OTHER COARSE FISH | 83 |

“ Fish Fine for Fine Fish ”

I.—PERCH



THE perch is widely distributed in England, being commonly found in rivers, ponds, canals and lakes. It frequents Scottish waters also, especially in the Lowlands; we have taken them in Perthshire, too, and once landed a two-pounder on a large pike spoon bait in Fifeshire.

It is a very handsome fish in shape and colouring, especially when its large spiky dorsal fin is erect and the bright vermilion of the other fins shows up against the darker colours of the body; the back is a rich greenish brown, shading to yellow and white on the belly, and there are broad vertical bands traversing the sides. Although apparently very conspicuous, this colour scheme blends wonderfully with the reeds and other water plants which grow in the perch's favourite

haunts, so that it is often difficult to spot one, even in clear water.

The colour is densest when the fish is undisturbed or particularly satisfied. It will turn pale with fear in an instant when hooked or frightened, the colour globules in the skin reacting to the nerve impulses and contracting immediately.

Its growth depends largely on the amount of food available for the number of fish ; in crowded waters perch do not grow quickly or to any size, but in a suitable environment they may reach 3, 4 or even 5 lbs. The largest of which there is exact record was taken in the Waveney in 1889, and weighed 5 lbs. 8 ozs., but larger perch have undoubtedly been taken, up to 10 lbs. in weight.

A curious instance of the voracity of perch was described by the late Mr. Cholmondeley Pennell, who, when fishing at Windermere, accidentally removed the eye of a small perch which he was unhooking. As the fish was too small for the basket, and as bait was running very short also, Mr. Pennell returned the maimed fish to the water and put the displaced eye on a hook as bait. It was almost immediately taken by a fish which, on being landed, proved to be the original owner of the eye.

Perch spawn in April and May, depositing large quantities of eggs in the form of strings of tiny beadlets, each covered by a gummy substance and adhering by that means to the others and to the roots of the bushes and trees on which they are festooned. Unfortunately

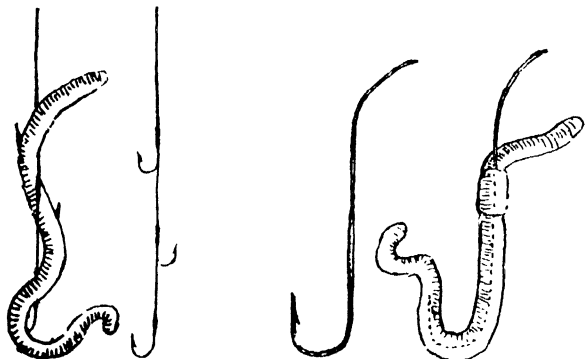
the ova are conspicuous by their bright appearance and so attract the destructive attention of ducks, swans and other water-fowl, who quickly reduce the original quantity to a very small amount.

Perch are gregarious and swim about in shoals. When fishing for them one can often get a number at the same spot ; if, however, a hooked fish gets away, the others seem to realise that there is trouble about and at once leave that spot. If you lose a fish it is well, therefore, to try somewhere else rather than continue at the same place.

No fish give better chance of sport to the youthful angler than perch, for they can be taken on the simplest of tackle, and the garden worm is a deadly bait. They are not shy feeders, but take the bait with decision and the float goes down with a " plop " ; they swallow quickly, too, and it is necessary to strike almost at once in order that the fish be hooked in the mouth and not deep down in the gullet.

There are many ways of fishing for perch, and these can be adapted to the particular places being fished. Holes about rotten timber, roots of old trees, landing stages and similar places are all favourite haunts, and if the fish happen to be roaming they can quickly be gathered together by almost any kind of ground-bait. As good a lure as any is a small lobworm threaded on a single round-bend hook tied on fine gut. Pinch a few split shot on the cast about a foot above the hook and fix the float so that the worm is within a few inches of the bottom. In running water the

float can be dispensed with and a two-hook or three-hook (Stewart) tackle substituted for the single hook.



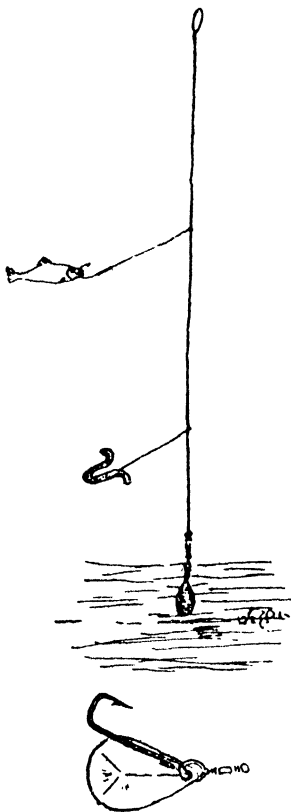
Another method is to use a paternoster, which consists of about two yards of gut with a small pear-shaped lead looped on to one end. Two or three hooks stand out at right angles from the gut, one a few inches from the lead and the others higher up at intervals of not less than 12 inches. Two baits are usually sufficient, the bottom one being preferably a worm, and the upper one a live minnow hooked through one or both lips or through the base of the dorsal fin. The hooks for paternoster fishing should be on rather stouter and shorter gut than for float fishing, so that they stand out from the main gut and do not curl round it.

Gentles or maggots are taken greedily, but chiefly

by the small fish, and their use is not recommended for that reason.

Almost any kind of artificial spinning bait will take perch, even a large pike bait, but the most generally useful is a small silver and copper spoon, about 1 inch long.

Fly fishing for perch is good fun in late summer and early autumn; a fair-sized "Zulu" or "Wickham's Fancy" will do, and where the stream is rapid it is a good plan to wade out and cast in towards the bank, letting the fly land near the edge of the shingle. A small fly spoon about $\frac{1}{2}$ inch long, small quill minnow or a gilt Magnet spinner can all be used like a fly. Perch can be



seen, and heard, jumping freely, and they come out of the water with a peculiar noise, a sort of r-r-r-ip which can be very disconcerting until one discovers its source.

When you land a perch handle it carefully, for the dorsal fin spikes are very sharp and aggressive. Slide your hand from the head backwards along the body so as to close down the fin like the blade of a knife.

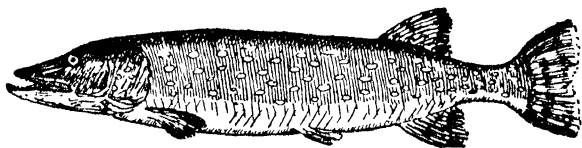
Fish fine, keep on fishing, do not stay too long in one place if you are not catching any perch, see that your bait is fresh and tempting, and you will be duly rewarded.

COOKING

And when you have caught your fish, eat it, for, properly cooked, perch is very good—much better than trout in the estimation of many. Here is a recipe recommended by the Editor of the *Field*. After cleaning, the fish should be wiped thoroughly with a wet cloth inside and out (on no account soaked in water) and consigned forthwith to the frying pan. After cooking the skin comes away easily, and the flavour is preserved.



II.—PIKE



THE pike is the biggest, most important and most widely distributed of all the so-called "coarse" fish as distinguished from the "game" fish (salmon, trout, etc.). It may be found in nearly every district, both in the still waters of lakes, ponds, reservoirs and canals, and in running waters.

The killing of a pike is never mourned, for it is the most rapacious of British fishes. Its food normally consists of small fish, which it seizes across the body and swallows head first; but it is not averse from a change of diet, and water-fowl, rats and voles, and almost any warm-blooded animals that frequent its territory are sought and devoured. In the spring when frogs are spawning the pike seeks them out; no doubt it also eats tadpoles, newts and shrimps.

Many tales are told of the voracity of pike and their strange meals. In the original *Magazine of Natural History* it is recorded that a young gentleman walking in a garden at Melton on the banks of the River Derwent saw a fine pike dart out of the river and seize a swallow

that was gliding along almost on the surface of the water. The account adds that the sun might have been so low as to throw the bird's shadow much in advance of it and thus give the pike an advantage, but we do not vouch for the truth of the story.

From the pike-fisher's point of view, however, too many of the smaller fish are killed instead of being returned to the water to grow and fight another day, and most waters are too much fished to allow of many pike growing to the worth-stuffing stage. The age and size which pike attain are matters of uncertainty, but there is record of one of 58 lbs. caught in Ireland in 1920, and this probably ranks as the largest British pike. A good many fish from 30 to 40 lbs. have been taken, but a 20-lb. fish is a notable one now, and anything over 10 lbs. is worth "writing home about."

The best Midland pike of which we have heard was taken at Chillington pool in Staffordshire in the early part of last century. It weighed 46 lbs. and was 51 inches in length. Inside it were found a trout of 4½ lbs. and a mole. Stones are sometimes found in the stomachs of pike and other fish, but these additions to the fish's weight may have some connection with a fishing contest.

Growth depends largely on the amount and quality of food available; although we have examined pike of over 20 lbs. which were only 10 years old, as shown by their scales, most fish of this size are probably 15 years old or even more.

Pike spawn towards the end of February and in

March and April ; but circumstances of temperature and weather in the winter may delay the spawning until even later. They recover slowly and are essentially winter fish, so that they are hardly worth catching until the end of September or early October.

Young pike are striped with yellow bars which show up vividly against the deep green of the back and sides ; but these yellow stripes in their green setting very closely resemble rushes in the water, and the young fish, keeping for safety in reedy patches (they might be devoured by their own parents), are very inconspicuous. Their colouring is helpful, also, in stalking their prey ; when the flash from the silvery side of an unsuspecting young dace or roach reveals its presence to the pike, a quick movement of the powerful tail will bring the hunter within striking distance. This " striking " of the pike is a characteristic sight in the shallower portions of ponds and lakes where smaller coarse fish abound.

Gaining courage as they grow, the pike take to clearer water (and in winter, of course, many of the weeds die down) and the bars break up into spots seemingly in imitation of the stones on the bottom. Adult pike are generously spotted all over back and sides and have no need of any sort of imitative protection ; they lord it over all the inhabitants in their neighbourhood and know only the law of might. A pike's mouth bristles with sharp teeth : those in the lower jaw are pointed and erect and used for seizing the victims ; those in the roof of the mouth are slender and very sharp, arranged in parallel bands, pointing backwards and easily

depressed to allow free access to the gullet, but rising quickly again to prevent escape. Always use a gag when removing a hook from a pike's mouth ; the writer has on his thumb an ugly scar which is a reminder of careless and very painful handling of a supposedly dead pike many years ago. In this connection, gruesome incidents are recorded in fishery annals ; in 1882, while a young girl was washing her hands in a pool at Stratford in Staffordshire, a pike seized one hand and held on until it was with difficulty hauled ashore thereby, the girl's hand being much lacerated ; the account adds that the fish was two feet ten inches long. At various times young pigs and calves, horses, cows, swans, geese and even human beings have been attacked by pike, which seem to stick at nothing in their pursuit of food.

Fishing for pike is much too large a subject to be fully treated here, but some helpful hints may be given, and methods suggested which we have found to be successful.

SPINNING

Spinning is the best and most sporting method, but the rod should not be long and heavy ; the old notion that a pike rod must be a big, heavy weapon has long been exploded. Nine and half feet is long enough, but there must be sufficient stiffness in it to drive the hooks home well over their barbs. With reels of the " spool " type, such as the Illingworth, rods of seven or eight feet are sufficient, and for overhead casting with a multiplying reel six feet is enough. The rods should

have agate or porcelain rings to reduce the friction on the line.

Of reels there is a great variety and we have tried most of them. On the whole we prefer a fairly small free-running aluminium reel of the Nottingham type, if possible with a broad nickel rim to the drum to facilitate finger or thumb control. Multiplying reels, fitted with level-winding device, are easy to use, and long distances can be cast with these when once the thumb control on the line drum has been mastered.

About lines we repeat our favourite formula—"Fish fine for fine fish." A semi-dressed line will stand the wear and tear of spinning much better than an undressed one, and for live-bait fishing it is essential to have a line that will float.

Spin *slow and deep* for pike. The irregular flash of a spoon bait is often more attractive than the rapid spin of an artificial minnow. A band or splash of red on a spoon (easily put on with enamel) often adds to its effectiveness, but do not use too large hooks and see that they are kept sharp. We have often found that a flying mount (its treble hooks hanging inside the spoon from the top swivel) is better than having the hooks attached to the bottom of the spoon.

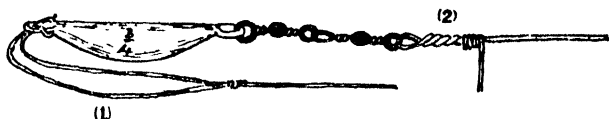
Natural baits, preserved sprats, etc., though a little more troublesome to handle, are probably more deadly as a rule. They have the advantage in trolling that they keep higher in the water and so can be fished more slowly than the artificials. It is a good plan in trolling to place a stone on the line between the reel and the

first rod ring ; the resistance of this weight on the line when a fish takes will generally be enough to send the hook home.

Use wire traces, either single or cabled, with a link swivel at the bait end and an anti-kink lead on the swivel at the line end ; thus you will avoid all kinking of the line, as the lead keels the swivel and compels it to function.

Attach your line by a large loop (1) doubled through the wire loop on the lead.

You can make your own traces with a spool of wire, some swivels and leads ; and it makes the neatest job of all to attach the wire direct to the swivel thus (2). See that both wires are twisting for the first few turns (2), not merely one round the other, and cut the end off closely.

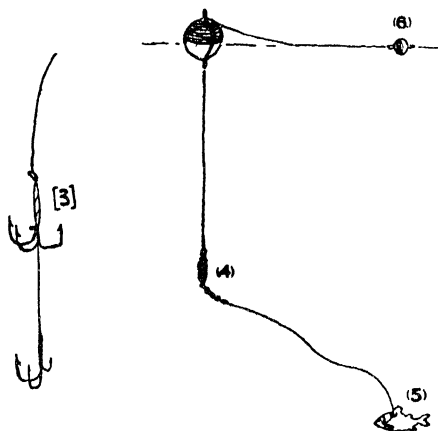


A wagtail bait is attractive, especially in trolling ; it is not so easily cast, however, as, say, a Reflet minnow.

LIVE BAITING

Almost any kind of live bait will attract pike. For smallish baits one treble hook, put through the muscle below the back fin, will suffice, but for larger baits a Jardine snap-tackle (3) is preferable—the small hook of

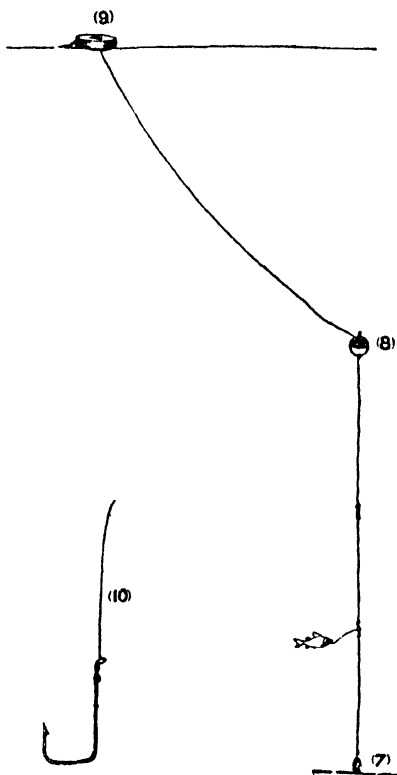
the end treble being put in the gill cover and the upper treble just below the back fin. Keep the lead (4) well away from the bait (5), not less than 18 inches, and use



fine tackle rather than the coarse stuff that so often passes for pike tackle. A *floating line* is essential and a small pilot float (6) should always be used to buoy up the first few yards of line to prevent it sinking and catching round the tackle. But unless the whole line is floating you will be in danger of losing fish through having much sunken line to recover before you can tighten up to get the hooks home.

Another method, especially useful on windy days, or when fishing holes among weeds, is the paternoster tackle. This has the lead (7) at the bottom and a submerged small float (8) on the line to keep it upright. In

deep water or if you throw the bait out it is advisable to have a large flat pilot float (9) with a good-sized hole in the centre, running quite free on the line. This float will

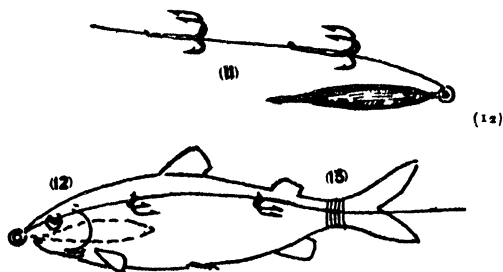


indicate the whereabouts of your bait, buoy the line and give notice, by standing up sideways, of any

unusual excitement down below. With small baits use a square bend single hook on fine wire (10), hooked through one or both lips of the bait. With larger baits use a treble hook. In either case give the fish time to get a complete hold of the bait, as this is carrying no body hooks.

SINK AND DRAW

Confined spaces and smaller holes can be searched with "sink and draw" tackle (11)—the method to which the term "trolling" more properly or, at any rate, more anciently belongs. The bait should have a lead (12) thrust down inside, one treble in the side and another at the tail, bound down with a few turns of fine wire (13). The trace is attached at the tail end, so that the bait dives head first and is withdrawn tail first.



FLY FISHING

Fly fishing for pike need only be resorted to in very weedy places where spinning or live baiting is impossible. A large gaudy salmon fly can be used in the ordinary

fly-fishing manner, and will sometimes be taken when no other method of fishing is possible.

CONCLUSION

Pike have a disconcerting habit of suddenly going off their feed, almost as if they had dropped off to sleep ; if this is experienced after a frosty night with a bright moon it may be that the pike have had a good feed in the moonlight and are satiated. Bright frosty weather, however, is generally considered best for pike fishing, though our experience is that the kind of weather doesn't matter much. We recently killed a 23-lb. pike in a Staffordshire pool when the snow lay three inches deep on the ground and the fog was so dense that we could not see where our spinning bait fell.

If all other methods fail there is still this one, which an ancient authority recommends : " The principal way to take a pike in Shropshire is to procure a goose, take one of the pike lines, baited, tie the line under the left wing and over the right wing of the goose, turn it into a pond where pikes are, and you are sure to have some sport."

COOKING

There are many ways of cooking pike, some very elaborate, but the following will serve as a basis and are within the capacity of every cook.

Boiling

Open and cleanse the fish, rub the inside with salt

(dissolved in claret or port, if you like), cut into 2 or 3 pieces and boil with plenty of salt. Let the water be boiling before you put the fish in piece by piece, and let it boil up after the first piece and before you put in the second, and so on. Serve with caper, anchovy or any other sauce you prefer.

Frying

Small pike should be split down the back, the long bone taken out, and then rubbed in flour. Fry in egg-batter with seasoning to taste.

Baking

Clean fish and cut off fins, leaving the head on. Stuff with the following :—

- 3 heaped tablespoonfuls of breadcrumbs
- 4 heaped tablespoonfuls of shredded suet
- 1 dessertspoonful of mixed herbs
- 1 dessertspoonful of dried parsley
- 1 egg, and a little milk to bind
- Pepper, salt and a squeeze of lemon

Finely chopped fat bacon can also be added and is usually considered an improvement.

Sew stuffing into the fish, place in a deep baking-tin, cover with 1 or 2 rashers of fat bacon, put $\frac{1}{4}$ lb. or more of lard into tin and cover all with greased paper.

Bake in a moderate oven for about an hour (for about 5 lb. pike), basting frequently.

Serve with plain melted butter.

Smoking

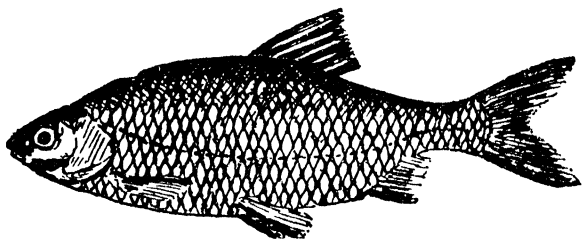
A correspondent writes : " If you like smoked salmon, get a pike cured in the same way and you will find it very good—equal to Lak salmon in the estimation of the writer."

Pike Soup

Clean and wash the fish ; weigh it and add half-a-pint of stock for each pound, a small onion, a carrot, a parsnip, peppercorns and a bay leaf. Boil very slowly for $1\frac{1}{2}$ to 2 hours, strain, add a little cream or butter, salt and pepper. Serve with cubes of toast.

In giving us permission to use this recipe, Mr. Arthur Ransome writes : " But, remember that one pound of fish should go to the making of each small plate of soup."

III.—ROACH



THE roach is probably the most sought-after of all English freshwater fish, and the number of fishermen who go after roach must greatly exceed the aggregate of all the others. In the Trent Fishery Board district alone the average number of licences issued for "coarse" fishing has been over 63,000 during the last three years; in Birmingham there are several hundred fishing clubs, only one of which is mainly concerned with salmon and trout. This is largely due to the condition of the rivers and waterways, for roach and other coarse fish can live under conditions which would be fatal to trout, and, therefore, many pools and many long stretches of canals, etc., often close to large towns, afford sport to the roach fisherman.

The term "coarse" fish is an unfortunate one because it suggests that roach and others so classified are in a lower grade than the so-called "game" fish, but a high

degree of skill is required to take roach in much-fished water and the tackle used must be very fine.

The roach is a member of the carp family and is at its best in the late autumn and early winter months after fully recovering from spawning in March and April. The ova are slightly sticky and adhere to the roots of trees, bushes, etc., in the water. When first hatched the fry are slightly curled in shape and on a summer day patches of these little creatures can be seen on the surface, each fish wriggling round and round in a small circle ; this action is necessary in order that they may not sink to the bottom and be lost in the mud. But before many hours have passed a small bubble of oxygen gas has formed under the backbone, and this swim-bladder, or air-bladder, enables each fish to maintain its position in the water without effort. The exact meaning and function of this air-bladder is not certain, but probably in addition to increasing the fish's buoyancy it acts as a reserve supply of oxygen.

Roach and rudd are very similar in appearance, but they can be distinguished with certainty if the positions of the dorsal and ventral fins are noted.



ROACH.

RUDD.

The dorsal and ventral fins of the roach are almost exactly in line, but in the rudd the dorsal fin is nearer the tail.

In crowded waters roach remain small, but in favourable circumstances they grow to two

or three pounds, and in the record fish to 3 lbs. 10 ozs. This fine roach was taken in August, 1917, by Mr. W. Cutting, at Hornsey Mere. One slightly heavier roach was recovered from Barrow Gurney reservoir, near Bristol, but that did not fall to the lot of a fisherman. Any roach over two pounds is exceptional and, if caught on fine tackle, a trophy of which one may be proud. Should you wish to perpetuate the memory of such a fish you will find simple directions for making a plaster cast of it in *Fisherman's Knots and Wrinkles*.

FISHING METHODS

There is a great deal to learn about fishing for roach and many books have been written on the subject ; it is only possible here to give a few general directions and useful hints based on our own experience. The first essential is really fine tackle, and a line which will float ; you must strike immediately the float shows any sign of a bite, and this is impossible if your line is sunken. We have found nothing better than Mucilin to keep the line afloat, but mutton fat or other animal fat will do. Place a little of the lubricant in the centre of a small chamois leather pad, bend this over the line and press together as you pull the line through.

In addition to fishing fine you should keep out of sight as much as you can, taking advantage of any bush or other background to render you as inconspicuous as possible. Do not let your companions, human or canine, walk about on the bank, because the

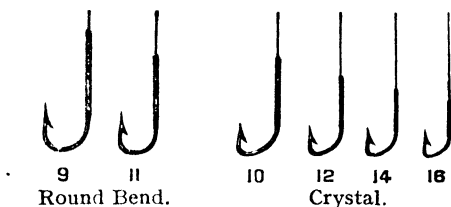
fish can probably see them, and heavy footfalls on the bank are easily felt in the water.

WEATHER

With regard to weather we have found that windy days are not good for sport, but otherwise it does not matter much what the weather is, except that roach seem to feed best when the water is slightly warmer than the air.

HOOKS

There is a wide difference of opinion about the best type of hook, and it is a good thing to stick to what you have most faith in ; our preference is for round bend hooks for worm, and crystal shape for gentles, etc. Standardisation of hook sizes has yet to come, and at present different makers' hooks vary at the same numbering, *i.e.*, Model Perfect hooks are two sizes larger than Crystals, etc. The most useful sizes are as follows :—



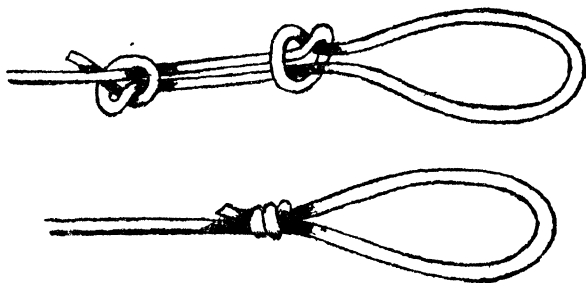
GUT

The lack of standardisation is also apparent in the thicknesses of gut, for the manufacturers' " X's " have

no definite relation to any recognised gauge. Expressed in "thous" the sizes should be :—

| | | | |
|-------|-------|-------|-------|
| ·005" | ·006" | ·007" | ·008" |
| 5x | 4x | 3x | 2x |

For roach ·006, if it is really good gut, is stout enough; for extra fine work with the smallest hooks ·005 may be used.



How to make a neat loop in gut.

GROUND BAIT

Ground bait should be used with discretion, for it should act as an appetiser to the fish to make him search for more, not as food for the day. This is particularly the case in regard to hemp-seed, which is perfectly legitimate as hook bait, but should only be used very sparingly, if at all, for ground bait. A good general ground bait can be made as follows :—

A loaf, without the crust, thoroughly dried, but not browned, in the oven, ground up fine and mixed with milk, sugar or other flavouring you fancy, a few gentles

small pieces of worm, hemp-seed, etc. This should be worked up into small pellets and a few of these thrown into the water at intervals. Wash your hands carefully before making ground bait or paste—roach do not like the flavour of tobacco !

HOOK BAITS

Hook baits are many and varied, from bread paste to elderberries, but maggots (the large, liver-bred ones) maintain their place as the most popular. Other good



baits are bread crust, hemp-seed, boiled wheat, barley, blood worms, wasp grub and flies. For paste use a largish hook, about size 10, and make the bait into the shape of a pear round the hook, taking care to have the point clear.

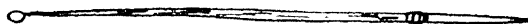
For maggots a No. 12 or 14 hook is generally about right, and for worms a round bend hook, No. 9 or 11.

Maggots can be coloured in various shades of pink and red by using Chrysoidine dissolved in ten times its bulk in boiling water. For the light shades, saturate bran thoroughly with the liquid and let the maggots remain in this until they have acquired the right complexion ; if darker red is required give the maggots a bath in the liquid itself—after it has cooled, of course. We doubt very much, however, whether the colouring makes the bait more attractive or even whether the roach can distinguish the natural from the coloured

maggot ; but use the bait you like best and you will probably get most fish with it, because you will unconsciously use it more skilfully.

FLOATS

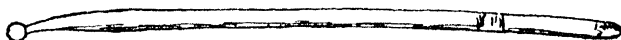
The golden rule for floats is to use the smallest and lightest that will carry the shot necessary to get your bait to the bottom. A porcupine quill is considered the most sensitive of all, but the little " Kelly " float is excellent for light work, and the pelican quill where many shots have to be carried.



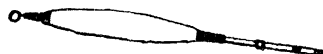
Porcupine Quill.



Cork on Quill.



Pelican Quill.

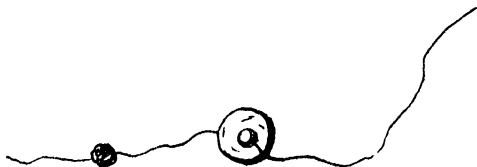


" Kelly."

Do not waste time fishing with your float adjusted in a haphazard manner, but ascertain the depth exactly by using a plummet, which for this purpose is a lead with a ring at the top and a piece of cork let into the bottom. Pass the hook through the ring and stick

the point firmly into the cork ; if you merely hang the plummet on to the hook by its ring it will reach the bottom all right, but will remain there.

The bait should travel down stream on or as near the bottom as possible, for roach are bottom feeders ; but, at the end of its travel the line should be slowly withdrawn from the water for the next cast, because a fish will sometimes follow the bait and take it as it is drawn up. The bigger fish, being more wary, must



often look askance at a bait floating down with the current and are more likely to take one that is resting on the bottom, especially in quiet streams. Here the leger tackle is most useful ; it can be used either with or without a float. Near the bait, not more than two or three inches away, place a small shot to act as a stop and thread a pierced bullet or large shot on to the cast, where it will slide freely, being only restricted in a downward direction by the shot near the hook. A good bait for this tackle is a small worm or the tail of a lobworm, on a round bend hook about size 9.

When fishing in water deeper than the rod's length, it is necessary to use a sliding float to enable you to wind in the line ; this type of float has no cap, but in its

place a second ring through which the line also runs without hindrance ; a small stop, in the form of a fragment of rubber band tied into the line above the



float will prevent it sliding upwards beyond the desired maximum distance from the hook ; in winding in, this stop will come through the rod rings and the float will slide back to the shot on the cast.

SINK AND DRAW

This is a useful way of searching water, especially in the summer. No float is required and only one or two shot. Swing the line out and let the bait sink, then slowly draw it up by raising the rod point, repeating the "sink and draw" until the current brings your line close to the bank ; then move a foot or two and try again. Roach are gregarious ; if you get one there will probably be a number near that spot and you can settle down there to fish in the ordinary way.

RODS AND CASTING

The general styles of fishing for roach are known as "Nottingham," "Sheffield," "Thames," etc., and have been adopted as best suited for the varied conditions obtaining in different waters. The Nottingham style, for instance, is best suited to rivers like the Trent, where the depth of water and pace of the current vary

every few yards. It might be described as the "fine and far off style" and calls for a shortish and not too stiff rod and a long line. The Sheffield style is deadly in much-fished waters where the very finest of tackle alone has any chance of success—float and shot so light that the whole can be cast with a modified overhead motion resembling the casting of a fly. The Thames style can be described as that of a long rod and a short line, the latter being fixed to the point of the rod, which may be as long as 18 or 20 feet. The long roach pole of the Thames and the Lee is not often seen in the Midlands or the North, where the short rod and long line are almost universal.

WHERE TO FISH

In slow rivers, broads, canals and lakes where roach abound they can be found nearly everywhere, providing the bottom is fairly clean. The selection of the most likely places, however, is a matter calling for much observation, experience and, to some extent, intuition.

In more rapid rivers and streams the fish leave in July the weed beds, where they have been resting and recuperating after spawning, and take to more open water with gravelly bottom. They are fond of the eddies by the side of fast streams, and avoid the strong and rapid water; they like the slow lazy curls under bushes, the quiet corners away from the main stream, the curls and eddies near a weir or in the neighbourhood of an old wooden bridge, and sometimes the shallows of a mill tail.

FLY FISHING

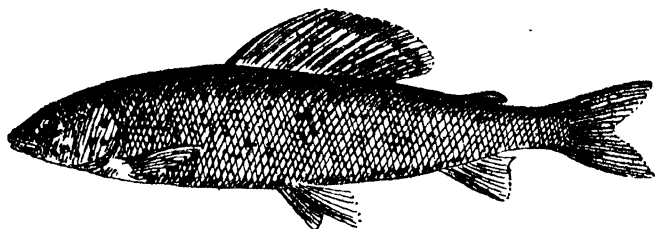
Roach will rise to fly when they are in shallow water, and will take most small flies, just as dace will. It adds to the pleasure of fly fishing for roach if you can see the fish, for they take the fly leisurely and will follow it for some distance before taking ; so do not hurry, and do not show yourself more than you can help. Good patterns are Black Gnat, Wickham's Fancy, White Tag, Soldier Palmer, etc. Use a two-yard cast tapered to .006. Roach can sometimes be taken by dapping with a natural fly—if they won't take the larvæ (maggots) they may be tempted by the perfect insect.

COOKING

And now to cook the fish you have caught. Here is a very old recipe. Without scaling, throw some flour over the fish and lay it on a gridiron over a slow fire. As it grows brown make a cut in the back, not more than skin deep, from the head to the tail, and replace on the fire. When sufficiently broiled the skin and scales will peel off and leave the fish clean and firm. The belly is then to be opened and the inside will come away cleanly. Scraping and washing take away all the flavour and firmness of the fish.

If you prefer to clean the fish first, do so with a wet cloth thoroughly inside and out, but do not soak in water ; then broil as above or fry in the usual way. The larger fish can be scaled and filleted, rubbed in egg and breadcrumbs and then fried.

IV.—GRAYLING



THE grayling is a near relative of the trout ; although not quite the trout's equal in fighting quality, it comes pretty near. Slower than the trout after the first rush, the grayling has a dangerous habit of rolling and twisting that is very trying to nerves and tackle ; it has, moreover, the very strong claim to the fisherman's attention that it keeps the fly-rod going months after the end of the trout season.

Grayling spawn in April and May and are not in fit condition to be caught before the end of July or the beginning of August. They are at their best, from the fly-fisher's point of view, in September and October ; later, when there is little or no hatch of fly on the water they yield good sport to " grasshopper " grub and worm.

In their first year grayling are known as " pinks " ; at two years old, when they weigh about $\frac{1}{4}$ lb., they are

called "shot" or "shut" grayling; and after that they have no prefix but are simply grayling.

The record fish stands to the credit of Dr. T. Sanctuary; it weighed $4\frac{1}{2}$ lbs., and was taken at Bemerton on the River Wylde in 1885. There are a good number of fish recorded from 3 to 4 lbs., but anything over 2 lbs. is an exceptional grayling, and the general average is much less, especially where the numbers of fish have not been kept down.

APPEARANCE AND HABITS

The grayling does not appear to be a native of the British Isles, because of its very limited distribution, but there is no real evidence to show that it is not indigenous. It is seldom found in Scotland or Ireland and is confined to comparatively few rivers in England. This restricted area of habitat may be due to circumstances of temperature and river conditions, the grayling being more suited to the sandy and loamy bottoms of English streams and the absence of extremes of temperature.

It is a handsome fish with two outstanding features—the oval or pear-shaped pupil and the extraordinarily large dorsal fin. Although thicker and more hump-backed than the trout, the grayling has a finer tapering towards the tail, so that, length for length, it is not appreciably heavier than the trout. The dorsal fin shades from bright red to violet at the edges, with purple streaks and black and blue spots, and has often

been compared to the wing of a butterfly. The grayling is supposed to smell of thyme or cucumber ; this may have been either the cause or the result (by suggestion) of its scientific name *Thymallus*, but there is a very wide divergence of opinion here—our own experience rather discounts the existence of any particular scent in newly-caught fish.

Grayling do not dwell, as do trout, in rapid shallows ; they require a combination of pool and stream—a deep quiet pool for rest, with a stream at the head of it and a shelving tail where they can sport and feed.

They are gregarious and are seldom found rising singly ; when on the feed they rise freely, coming up from the bottom quickly and persistently, so that one need not fear to put them down, as is so easy with trout, by repeated casting. Frequently, however, they appear to be rising very short or making bad shots at the fly and missing it, as they rise straight from the level at which they were lying. They usually lie in deeper and faster water than trout, and the best way of offering your fly is to cast across and let it come round with the stream. Use as short a line as will cover the water and strike or, rather, tighten immediately the fish rises to your fly. Although ready risers, however, grayling are often quite as capricious as trout and as difficult to catch.

FLY FISHING

The same rod, reel and line you use for trout will do for grayling and many of the same flies. In general the

floating Duns are the best in the South, the bumbles and tags in the Midlands, and the spidery hackle type in Yorkshire and Northern streams; but probably as many grayling have been killed on the Red Tag as on



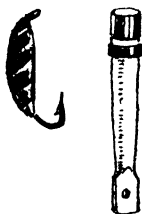
any other fly, and we ourselves have frequently done better with that fly on Wiltshire rivers than with the more natural-looking Olive Duns, etc. A general assortment should include Red Tag, White Tag, Claret Bumble, Yellow Bumble, Witch, Green Insect, Hare's Ear, Olive Dun, Wickham's Fancy, Black Gnat, Red Spinner, and any others you fancy.

Gut casts should be fine, tapering to .006 (4x) and preferably the dark brown "Erebus" shade, which is as nearly invisible in the water as gut can be and does not glitter or flash in the air.

THE "GRASSHOPPER" LURE

The origin of this bait is unknown, but it has been in use for at least a century and is still deadly in certain districts where it is known. Why it should be so called, since it does not resemble that insect, is another mystery, but possibly it was originally intended to resemble a grasshopper.

In the early winter months when there is little hatch of fly to tempt the fish to rise, they can be taken with this " grub " fished with a sink-and-draw motion. The hook is leaded and dressed in bright colours ; two or three lively gentles are impaled on the point of the hook, or in default of gentles a cabbage grub or the tail of a small worm. The most likely places to search are deepish streams (3 to 5 feet) ; a tiny float, to mark the



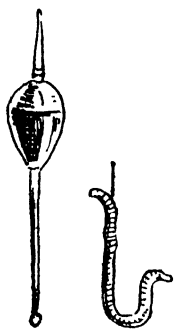
depth and so facilitate the operations, should be fixed just above the surface level. Use a light line and have rather less than the rod's length out (a roach or bait rod of 10 to 11 feet is better than a fly rod). Swing the bait over the stream and let it sink to the bottom, checking the descent so that it will take a slanting direction ; the marking float will show when the bait has touched the bottom and it should then be raised at once by short, jerky movements to the surface. Search all the water within reach and then move on a yard or two and repeat the operation.

This grub will also take perch, roach, dace, chub and even small pike, and is a useful variation of the usual methods of killing these fish.

WORM FISHING

The most sporting method of winter bait fishing is probably that of swimming the worm, and this requires much skill and caution. A stiffish rod is advisable with

free-running reel, light floating line, fine gut and small hook baited with a little red worm, two or three shot near the hook, and a tiny float about 3 or 4 feet above. Grayling love to lie together along the sloping sandy shelf of a fairly strong stream in from 2 to 5 feet of water, and the object of this type of approach is to let the bait swim so as to touch and go on the bottom where the fish are. Bright frosty weather is best, and extreme alertness and caution are essential to success. Grayling in these circumstances bite very gently and seldom take the float under, so one must be prepared to strike quickly and firmly when the float shows the slightest slant. Grayling will also take gentles, wasp grub and caddis bait, and these give further opportunities on winter days when fly is useless. They will also take a natural minnow spun on fine tackle, or even a small artificial bait, but these are more likely to be successful in the earlier months, when it is not necessary to resort to anything but the fly.



COOKING

Baked

Clean and wash the fish. Dry it well, place it in a baking dish in which a little butter has been previously melted. Season with salt and pepper, cover with a greased paper, and bake gently from 25 to 35 minutes,

basting occasionally. Or wrap the fish in greaseproof paper and bake in a tin.

Fried

Clean, wash and dry the fish, remove the fins and head. Roll in flour seasoned with salt and pepper, coat carefully with egg and breadcrumbs, and fry in hot fat until nicely browned. Serve with parsley and butter sauce, or any other sauce preferred.

Grilled

Clean, wash and dry the fish. Brush it over with salad oil, sprinkle with salt and pepper, and grill for about 10 minutes until sufficiently cooked and nicely browned. Serve garnished with quarters of lemon.

Mustard Sauce for Grilled Grayling

$\frac{1}{2}$ oz. cornflour

1 oz. butter or margarine

$\frac{1}{4}$ oz. flour

$\frac{1}{2}$ pint water

1 $\frac{1}{2}$ dessertspoonfuls of dry mustard

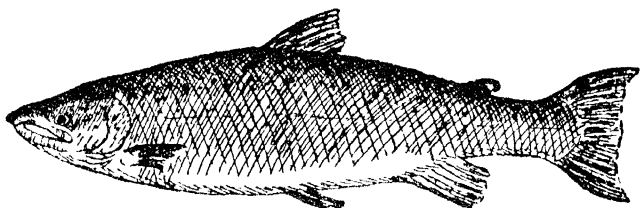
$\frac{1}{4}$ teacupful of vinegar

$\frac{1}{2}$ teacupful cream (or milk)

Pepper and salt

Melt butter in a saucepan, stir in the cornflour and flour and blend over the fire without browning. Add water and bring to the boil. Cook for 10 minutes. Mix the mustard with vinegar and make a smooth paste, stir this into the sauce with the cream (or milk). Boil up again, season to taste and add a little more vinegar before serving.

V.—SPRING SALMON



THE Atlantic salmon is frequently described as the chief of sporting fishes ; it certainly has strong claims to such a distinction in its physical grace and beauty, its athletic powers and fighting qualities, its intrinsic worth and its value as a national asset.

The salmon that come into the rivers in spring are the offspring of parents who spawned, in the same rivers, from four to eight years ago. Salmon enter fresh water for the purpose of reproducing their species ; the eggs cannot live in salt water, and the parent fish search for shallowish running water with gravelly bottom, where the spawn can be shed (in late autumn) with the best prospects for its development and for the young when they hatch out in the succeeding spring.

A moment's thought will reveal the extent of the damage done when fish are poached from the spawning beds. Having survived all the hazards of the perilous journey from the sea, these salmon are certain repro-

ducers of their species and will affect the population of the river for the following seven, eight, or nine years. The eggs laid in the autumn of 1931 will hatch out in the early spring of this year (1932). Some of the parr may go to sea as smolts in the summer of 1933, many more in 1934 and some even as late as 1935. The 1933 smolts may return as grilse in 1934, as two-year-old fish in 1935 and so on. The 1934 smolts will be returning as adult fish as far on as 1938 or 1939.

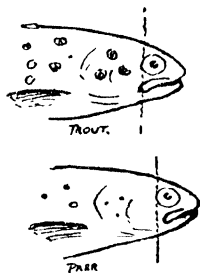
It is a much less serious matter, so far as doing harm to the stock of fish in the river is concerned, for poachers to take a fish or two in the estuary during the close season than to take them from the spawning beds.

It is believed that three-year-old smolts are capable of fertilising the eggs of full-grown salmon, and that their remaining so long in fresh water is a provision of nature, a kind of insurance scheme, for the continuation of the race in case of a great scarcity, or total absence, of adult cock fish. Possibly, too, that accounts for the great mortality amongst cock kelts—they would be the older fish. Many more male fish than females die soon after spawning.

The number of eggs laid by any one fish is often greatly overstated; a book, published within the last ten years, gave the number for a 20-lb. salmon as 20,000,000—a quantity that would weigh more than a ton. The actual number is less than 1,000 per pound of the fish's weight, but although that is a substantial total the drains upon it are so formidable that a very small percentage eventually reaches the adult stage.

Floods and frost play havoc with the beds, much of the spawn escapes fertilisation, eels and trout take a large quantity, as also do water-fowl. In the fry stage, too, the young salmon are at the mercy of many enemies seeking to devour them, and so their numbers are steadily lessened. When the parr are ready for their first migration they work gradually downstream, assuming the silvery coating over the scales which is characteristic of all the fish that live in the upper waters of the sea, near the surface. Before they reach the sea, however, many smolts are captured by mergansers, goosanders and other sea birds, as well as by the larger fish.

It is difficult to describe in writing the difference between a parr and a young trout, but the accompanying sketch will help. The spots in the former are more regular and the "thumb" marks more pronounced; the mouth of the parr is small, about twice the diameter of the eye if measured to the back of the maxillary bone, whereas in the trout the length is $2\frac{1}{2}$ to 3 times the diameter of the eye. The maxillary bone is short (aid to memory—"s" for short and for salmon) and does not extend as far as the back of the eye in the parr, but in the trout it extends beyond the eye. But the golden rule is to give the little fish the benefit of any doubt and put it back uninjured. Young fish are easily



injured and should be handled as little as possible. If you hold the fly firmly and let the fish wriggle in the water it will generally manage to get free.

The return migration is also divided and is spread over four or five years. The fish that return after one winter in the sea are called grilse and, except that they are younger-looking and that their scales seem to come off easily, they are very similar in appearance to the small spring fish that have spent two winters in salt water.

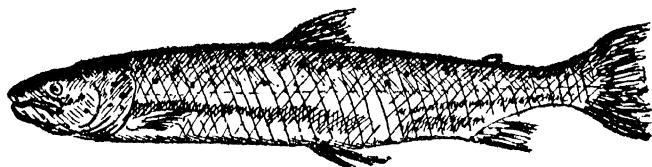
The next to come are the small spring fish that have had two summers feeding and two winters in the sea. When fresh run these fish are perfect in form and colour, just at their very best. There is very little external difference between the sexes at this stage and, taken singly, it is often very difficult to say which is which.

The larger spring fish have had three, four or even five years' sea feeding. The forty-pounders are generally cock fish and it is unusual to get a hen fish of that weight. Many of these fish have not previously spawned and are ascending the rivers for the first time.

Exact determination of the fish's age has been made possible by the discovery that they carry about with them their birth certificates, written on their scales. The scales are developed at the "fry" stage, and as the fish grows so do the scales, in order that the expanding flesh may be covered. This growth is from the centre of the scale outwards and can be seen in the form

of concentric rings, which are in reality the outside edges of the succeeding deposits on the under side of the scales. This subject is very clearly explained by Mr. Arthur Hutton in his book, *Salmon Fishing on the Wye*.

When the spawning season approaches, the fish assume what is aptly termed their spawning livery; the silvery dressing being changed for a dark chocolate, sometimes nearly black, coating. The tip of the lower



FEMALE KELT.

jaw of the cock fish is enlarged until in some cases it almost comes through the roof of the mouth. The purpose of this hook is obscure, but the fish makes use of it in his persistent fighting with other fish at spawning time, and it enables him to grip the other fish by the tail—almost like the thumb on one's hand. This change in the appearance of the fish is not, as is often supposed, the result of prolonged stay in fresh water, but is definitely a phase of the spawning operations. We have seen hundreds of such fish in the autumn, just up from the sea, as fat as pigs and with sea lice on them—yet as “black as your hat.”

It must not be assumed, however, that kelts are always dark in colour, for many of them mend quickly

and resume their silvery dress. Well-mended kelts cause much disappointment to novices, and much loss of time and temper to practised fishermen. Their teeth, too, are very sharp and work havoc with expensive salmon flies; this, taken in conjunction with the deterioration of teeth and gums apparent in the summer, led to the suggestion that new teeth are grown in the recuperation period after spawning time.

The much-discussed question as to whether salmon feed when in fresh water can be dealt with here only very briefly. As a general rule fish refrain from taking *solid* food during the spawning season (a plaice, for instance, could not continue feeding on small molluscs, etc., while she is developing roe which ultimately fills the whole body cavity), but there is nothing in the known habits of the salmon to show that they will not take food in fresh water when they can get it. Possibly they may take sprats, prawns, worms, etc., for the purpose of chewing them and swallowing the juices. We have on several occasions reeled in a bunch of worms that had been chewed to pulp, when trying to get a salmon early on a frosty autumn morning; and on the same Scottish river we have seen salmon persistently taking March Browns on a spring day. We are convinced that salmon will take hold of a tempting morsel of food when it is available, and so we shall continue to offer a fly or a spinning bait served up in the most appetising way we can.

SPRING FISHING

Here again we can only give some general hints based on our own experience, sufficient to enable the beginner to grasp the essentials and be ready to tackle the study of local conditions on particular rivers.

Early spring fishing calls for some endurance as well as for the virtues of faith and hope. Make quite sure that you have sufficient warm clothing and, in particular, that your waders are roomy enough to accommodate an extra pair of thick stockings over the ordinary socks. Few of us, we fancy, would care to act up to the advice of the old writer, Scrope, who says :—

“ Never go deeper into the water than the fifth button of the waistcoat. Should you be wading when it may chance to freeze very hard, pull down your stockings and examine your legs. Should they be black, or even purple, it might, perhaps, be as well to get on dry land ; but if they are only rubicund you may continue to enjoy the water, if it so pleases you.”

If you have the misfortune to tumble into a hole or slip on a stone and get your waders filled with water, do not try to struggle against the stream, but go with it, edging in towards the bank all the time.

Never wear brogues that have hook-eyelets for the laces, because if (as has happened with fatal results) the loop of one lace catches on the hook of the other boot your position will be uncomfortable and may be perilous.

If your legs feel damp when wading, it is most likely due to condensed perspiration and not to a leak in the waders. If in doubt, turn the waders inside-out at night and, after allowing the dampness to dry off, partly fill them with water and hang them up by the braces. If there is any leak, it will quickly show, and the place should be marked at once.

The choice of a rod depends to some extent on the type of river to be fished. For fly fishing 16 ft. is the extreme length now used (the older 17 and 18-ft. rods have quite gone), but 15 ft. is usually ample and is altogether more pleasant to fish with. For spinning, 11 ft. may be necessary, especially when fishing from the bank, when you have to recover the bait from shallow water or from amongst bushes, etc. A 9-ft. rod, however, is very much handier and lighter, and will suffice for most rivers where wading is possible.

Of spinning reels there is a very wide choice; from the new salmon Illingworth and Helical patterns, which are all but automatic, through many varieties of mechanically-controlled patterns with levers, back-peddalling devices, engraved pressure gauges, etc., to the free-running, finger-controlled type. Our own preference hovers between the Helical, with whose perfection we sometimes get bored, and a free-running aluminium Nottingham reel with a silver rim on which finger or thumb operates smoothly, with which we still occasionally get an over-run.

With regard to lines, it is absolutely essential in fly fishing that the line should fit the rod perfectly. Good

fly casting is impossible unless rod and line are properly matched.

In spinning use the finest line that has sufficient strength and staying quality. It should be waxed or greased to nullify the friction on the rod rings. This friction is greater than is generally supposed ; we have seen agate rod rings worn into grooves, and steel rings almost cut through after a season's spinning.

In the spring, fly fishing and spinning are not very far removed from one another, and, if anything, spinning is the more difficult.

Spring salmon are not so active as summer fish, and to tempt them one must, so to speak, take the bait down to them and offer it on a plate—waiting till they decide whether or not they care for that item of the menu. When the atmosphere is definitely warmer than the water, salmon can be tempted with a fly or bait on or near the surface (we have taken salmon in such circumstances with a bait almost skimming the surface), but otherwise your fly or minnow should be tripping on the stones at the bottom. Mid-water fishing is largely a waste of time.

Large flies should be very thinly dressed, with small heads, so that they offer little resistance to the water and sink readily.

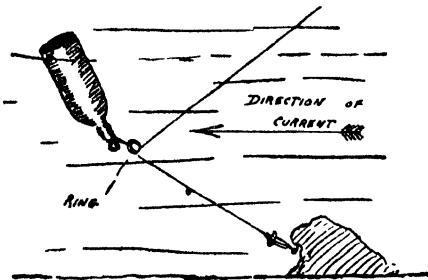
Fishing an unknown water is always difficult, because, unless you know the depth, you can never be sure that your fly or bait is getting anywhere near the fish. Merely going down a pool mechanically is waste of time, and pottering about is worse. With a spinning bait

you can generally feel the bottom and keep near to it. Sometimes you may have to change the weight on your trace several times in one pool, and the easiest way to do that is to carry a range of anti-kink leads (small bullets with a link-spring for attaching to the



trace swivel next the line) of different weights in your pocket. In deep fast water cast well downstream over towards the opposite bank and let your bait come across as slowly as possible ; once it is obviously away from the possible lie of the fish wind your bait in quickly and make another cast.

When the bait gets hooked up in some hidden object on the bottom, try one of the many " releasers " before going below the obstruction with the rod, etc., as that disturbs fish there. A hoop made of a withy, or other twig, and run down the slackened line will exert a good pull below the bait and often clear it. An empty (corked) bottle, having a chicken ring attached to

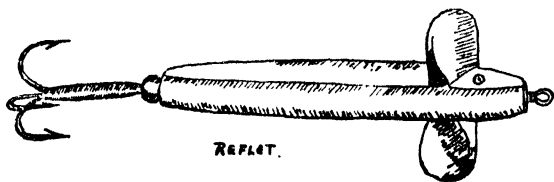


its neck, is also effective. The ring is screwed spirally on to the line beyond the top ring of the rod ; when the hoop (or bottle) is down to the bait, slack away some yards of line and then lift your rod to get the maximum amount of drag from below the obstacle.

Avoid unnecessary movements in the water or on the bank, and make your companions, canine or human, abstain from walking about on the skyline. Fish can see long distances, in spite of refracted light, etc., and moving objects on the horizon are objectionable to them.

The patterns of flies are legion, but, unless special local ones are recommended, a selection of Jock Scott, Wilkinson, Thunder and Lightning, Akroyd, Durham Ranger and Silver Doctor will suffice for most rivers.

With regard to baits, we have found that on the whole



the flat-sided Reflet minnow is the most reliable. It is easy to cast and seldom fouls the line, it flashes much brighter than the round types and—we are glad to be able to state—it can now be had cheaply, so that the loss of a minnow or two is a much less serious matter than it used to be.

Use wire for the traces, either single wire or cabled,

the latter being the more pliable, and as fine as possible.

Test your line frequently and break off any doubtful ends; the last few yards lose strength quickly, especially in the fine sizes. Dry your lines every night and rub them down with Mucilin; though a little messy, it is more effective to use finger and thumb for the purpose than any made-up gadget. A good line winder will save its cost in lines in a single season.

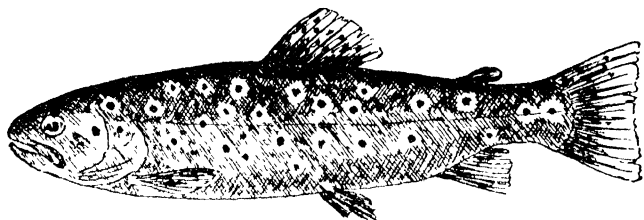
Should a fish run out nearly the whole of your line, don't be anxious about the end being fast to the reel, because you will have a better chance of finally securing the fish if it can get clean away with the line; the sudden check at the end would probably cause a breakage or pull the hook out, whereas a long length of free line can generally be hooked up later and the fight resumed.

Pay attention to details of tackle, such as knots, attachment of line to cast or trace, wire fastenings to swivels, etc. Spring salmon are all too scarce to allow of any carelessness in the matter of tackle. When, as often happens, your line freezes to the rod rings, hold the whole under water until thawed.



The blood knot.

VI.—TROUT



MORE than any other fresh-water fish trout differ in appearance, habits, size, and sporting qualities :

*A fish so various that it seems to be
Not one, but all fishkind's epitome.*

Some remain in the river about the same place throughout the year, only moving to find spawning grounds in late autumn. Some drop down regularly to the estuaries for the richer feeding there; the different salinity of the water does not seem to affect them.

Sea-trout have acquired the habit of feeding in the sea, but return, necessarily, to the river to spawn. " Bull-trout " denotes different fish in different districts; in the Tay they are not trout but much-spotted salmon, which have spawned the previous year and carry in those spots the remnants of their spawning livery. *Salmo-ferox* are merely old, and generally large, cannibal trout. Rainbow trout are not natives of our

waters, but originally came from California ; they flourish in some lakes and ponds, but do well in very few streams.

There is only one European trout, as there is only one European salmon ; environment, feeding, temperature, condition of the water, in-breeding, and other factors have produced the variations that differentiate, say, a Loch Leven from a Test trout. Scotsmen differ from Welshmen, and Pathans from Sikhs, but the former are none the less all British, the latter all Indian.

The difference in weight for age of brown trout is remarkable ; a four-year-old fish in a Scottish burn or Devon stream may weigh less than half-a-pound, whereas in a lake such as Blagdon a fish of the same age will often scale 3 or 4 lbs. Probably the chief factor in the rate of growth is food, for young trout feed largely on the larvæ of water insects, etc., and very clear rocky or stony streams do not harbour much life of that kind. The nature of the subsoil has an important bearing on the production of fish-food, the absence of lime, for instance, greatly reducing it.

The record British trout is said to have weighed 39½ lbs., and was taken (foul-hooked) on a fly in Loch Awe in 1866. We can speak personally about a trout of 29 lbs., caught in Orkney in 1889, as we assisted at the weighing of it. This magnificent fish, unfortunately, did not fall to the lot of an angler but was taken on a night line. The record Test trout weighed 18 lbs., and was caught by the late General Hickman in 1922.

About the life history of trout there is little of special

interest as they lead a fairly placid life ; in September they begin to move up to shallower water in search of spawning beds, and the development of the ova follows very closely that of the salmon. Trout are often seen on the salmon spawning beds, but always at a respectful distance from the cock salmon ; in all probability thousands of salmon eggs are eaten by trout.

Trout prefer side streams and small tributaries for spawning ; when that prolonged operation is completed they fall back into deeper water to regain their strength, brightness and shape. The eggs, being heavier than water, sink and lie among the stones and gravel. In about three weeks the fertile eggs show a small black spot and are then known as eyed ova. About six weeks later the little alevins hatch out, bringing the remainder of the egg-sac with them as a sort of feeding bottle to keep them going until their mouths develop and function, when they are called " fry " and begin to feed on the larvæ of water insects, etc. Now the young trout acquire scales, which grow as the fish grow and reveal their age in the same way as the salmon scales described in the article on salmon ; trout scales, however, are more difficult to read, as the various phases of growth in the salmon are much more marked, *i.e.*, migration from river to sea, rapid growth in the sea, etc.

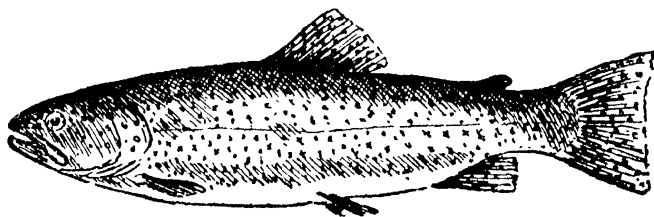
Fishermen are especially interested in the trout's eyesight. In spite of much observation and research we lack proof that the trout's eye functions in the same way as the human eye, or that we can rely on con-

clusions based on that analogy. The action of light, however, is known in its relation to water, and there are some general facts that the young fisherman can profitably bear in mind. If a ray of light can go from your eye to the fish's, it can come from the fish's eye to yours ; it follows that if you can see the fish's eye, the fish can see you. Obviously, therefore, the fisherman should keep hidden as much as possible. Owing to the refraction of the light rays where they enter the water the trout's vision of things outside is limited to a round window, varying in size with the depth at which the fish is lying. The window's edge is blurred so that objects outside the window, unless directly overhead, are probably much distorted ; hence the advisability of avoiding unnecessary movement on the bank. Objects in the water are seen quite clearly, and are also reflected clearly on the under surface of the water ; but only very innocent trout will mistake the shadow for the substance of, say, a fly. Flies on the surface, or between the fish and the light, will lose some of their more delicate colours, and probably colour is not so important in floating flies as shade.

Trout's recovery of condition in the spring is largely dependent on the hatch of their natural food—water-born flies and other insects—and that in turn depends on the temperature. While the air is colder than the water the hatch is retarded, and there can be little or no "rise" of trout to newly-hatched flies. The relationship of the air temperature to that of the water has not had the attention that the subject deserves.

Young trout fishermen should take every opportunity of noting the conditions prevailing when the trout are rising, and when they are not rising in weather conditions apparently favourable.

There are probably more ways of fishing for trout than for any other fish, ranging from the "guddling" we revelled in as small boys (we never understood the supposed "tickling" of trout preparatory to catching hold of them, for if you can get your hand near enough



RAINBOW.

to tickle the fish, why not catch hold of it at once?) through worm fishing, float fishing, spinning and fly fishing up to the super-purist stage when you study the habits of the birds which provide the feathers that go to make the exact imitation of the most delicate duns of both sexes.

Fly fishing is undoubtedly the most sportsmanlike as well as the most enjoyable method of catching trout, and the outfit need not be expensive. For stream fishing a rod of 9 ft. will generally suffice; for loch fishing a 10-11 ft. rod is the most convenient. Shorter rods are often required where trees and bushes make the banks

difficult ; the shorter rod requires a shorter gut cast and heavier line—or, what amounts to the same thing, a shorter taper to the line—so that there may be enough weight of line out to make the rod work efficiently. It is essential to good fishing that rod, reel and line should balance.

Casting cannot be taught in a short article, but there are some general rules that can be stated simply and must be observed if a good style of casting is to be acquired. The normal action of casting a fly, as of strokes in golf, tennis, cricket, hockey, etc., should be across the body. Aim the cast forward, not downward ; the action is similar to that of throwing a stone about 10 yards. The cast should fall lightly on the water, and fairly straight ; often far too much force is used. Hold the rod easily, because if you grip it hard you stiffen up every muscle in your arm and many in your body. In the back cast throw the line upwards and do not let the rod go back much beyond the vertical, or else the line will drop behind and catch in the grass.

Fly fishing in rivers and streams falls into two main categories, viz., dry fly and wet fly. Dry fly denotes fishing with the fly on the surface. The fly is usually cast upstream, above the fish, and allowed to float down over it ; but sometimes it may be necessary to cast downstream, or straight across, and then sufficient slack or “ belly ” in the line must be allowed to ensure that there is no drag on the fly. Wet fly means fishing with the fly submerged, and the cast is usually made down and across the stream, the flies coming round with

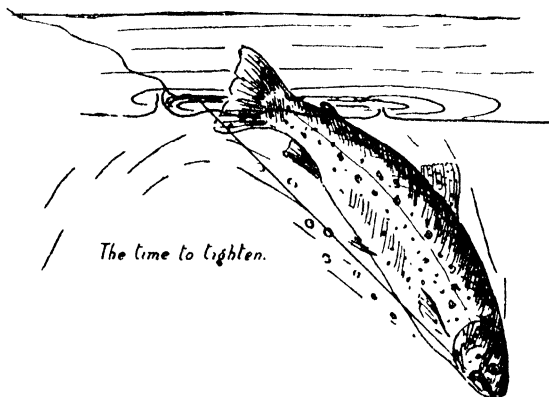
the current ; or, when there is insufficient current, being pulled round, over, or in front of the fish. The wet fly may also be fished upstream and allowed to float over the fish ; or it may be cast upstream with a short line and pulled downstream, frequent casts being made.

Artificial fly patterns are legion, but let not the beginner be bewildered ; a small selection can be made which will do for most rivers, and special local or seasonal patterns can be added in the light of experience. Maryatt, a famous dry fly fisherman, used to say : " It isn't the fly that matters so much as the driver." (This was in cab-horse days when the " fly " was in regular use.) Some successful fishermen are content with two or three patterns for the whole season ; many others waste much time in changing from one pattern to another. If you can recognise the fly at which the trout are rising, offer them an imitation, if you have it ; but if not, try something quite different. The President of the Casting Club de France told us that in the May-fly time, when fish are gorged with that delicately-tinted insect, he finds he can get good sport with an almost black " Mole " fly.

The nucleus of a collection of flies for general use should include March Brown (winged and hackled), Greenwell's Glory, Wickham's Fancy, Olive Dun, Coch-y-bondhu, Blue Upright, and Tup's Indispensable. The beginner should study the article on " The Fly on the Water," by J. W. Dunne, in *Fisherman's Pie*, and also the article on " Striking " in the same volume.

When trout are not rising, though the conditions do

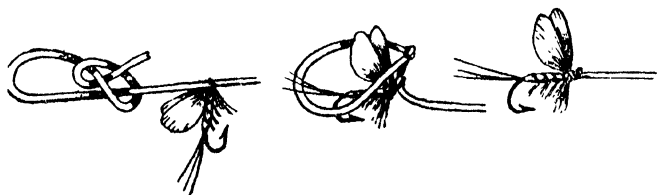
not seem adverse, try artificial nymphs ; these can be fished downstream like a wet fly, or upstream with the last few inches of the gut left uncoiled so that it and the nymph will sink. Even when a rise is on many



trout prefer to feed on the nymphs under water, and probably these immature insects form the largest item in the trout's food supply on many days. Early in the season the most useful nymphs are the Cob (March Brown), Early Blue, Large Dark Olive, and Iron Blue. Later, the Medium Olive, Pale Watery Dun, July Dun, Infallible and Half-stone.

Whether with wet fly, dry fly or nymph the fisherman must not be lazy or careless ; trout are easily alarmed, and a clumsy cast or a heavy tread on the bank will put them off taking.

Here is a good way of tying a fly to gut, taken from *Fisherman's Knots and Wrinkles*.



In bad light the tying on of a fly can be made easier by pushing its eye through a small piece of white paper, which can be torn off when the operation is complete.

For dry-fly work keep the line in order by frequently applying a little Mucilin ; use very little and rub it well in. Liquid Mucilin or liquid paraffin will make the fly float well ; dry it first by squeezing in a small piece of Amadou and then separate wings and hackles with a pin or small rod dipped in the liquid, of which very little is needed if rightly applied. A handy container is made of metal with screw top and leather tab to fasten to a waistcoat button.

A floating fly often does well on a pool, especially when there is no wind, or towards evening ; it must be of a buoyant type, and line and gut must be well greased. If the trout show no interest in the fly which is sitting on the surface, try a few gentle twitches of the line. A buzz-winged Alder is always worth trying, especially in the evening.

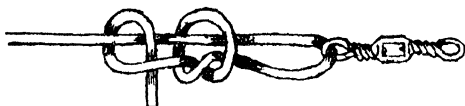
Next to fly fishing the most sporting way of taking

trout is clear-water worming. Worm fishing in a flood is all too easy, as trout are looking for the worms which the flood brings down, but upstream fishing with very fine tackle in clear water requires a high degree of skill. Fish upstream always, and wade whenever you can so that you may be low in the water and more out of sight than when on the bank ; with waders on, too, you can cross whenever it suits you and so can take advantage of friendly backgrounds. The line being shorter than when fly fishing, it is more difficult to keep out of sight, but that is imperative. Use a small lively worm on a 3-hook " Stewart " tackle with two or three shot on the cast, which should be about a yard in length and quite fine, and about the rod's length of line, or a little more if you can manage it. Cast or, rather, sling up and across the stream, searching the sides of the current where the best trout lie, watching what the main current is bringing down. Move forward very gently, avoiding rippling the water or displacing the gravel, after each cast. It is unnecessary to repeat any cast ; if you make a bad throw, do not snatch the bait out of the water, but let it come down to you. See that your line doesn't drag the worm, which should come down at the same pace as if it were free.

Spinning with a natural minnow is the best way of getting the big trout that will not come readily to a fly. The new Helical reel is as nearly perfect as a spinning reel can be ; with it the very finest of lines can be used with no fear of breakage, and the smallest and lightest baits cast with ease and precision. The tackle

should be fine, with small hooks and not many of them. When artificial baits are used, they should have only one treble hook and that at the tail. One of the best artificials is the Reflet, as its flat sides flash very attractively in the water. Reflets are painted in a variety of colours and are much less expensive than formerly. The round Devon baits, small spoons, quill minnows and other varieties will all kill fish.

Spinning traces should be as fine as possible, of either gut or wire ; as small baits spin fast it is well to attach an anti-kink lead to the ring of the swivel next to the line ; this lead, which can be quite small, acts as a keel and compels the swivels to function.



Method of attaching gut or line to swivel.

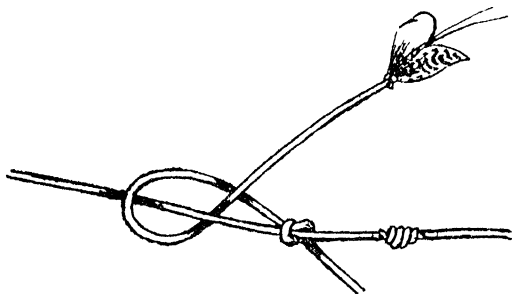
Very small spoon baits, Magnet spinners, etc., can be used with the fly rod, but require care in casting to avoid damage to a delicate rod.

Float fishing for trout is done in the same way as for coarse fish, except that it is not so necessary to get right down to the bottom. Trout will even take a maggot, and it has to be confessed that many "coarse" fish are more refined in their choice of food than the aristocratic trout.

On hot summer days a natural fly (bluebottle, Daddy-long-legs, May-fly, etc.) on a small hook can be "dapped" on the surface and will often tempt a fish ;

this method is especially useful amongst bushes, where it is difficult or impossible to cast a fly in the ordinary way.

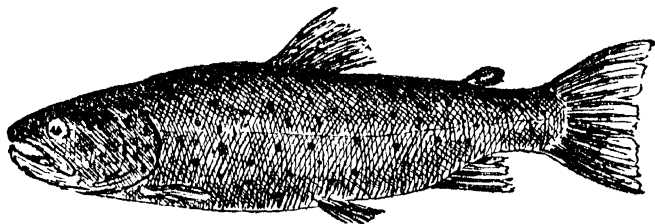
Loch fishing is a distinct branch of trout fishing and has its own delights as well as difficulties. A longish rod, 10 to 11 feet, is desirable, for it is usual to have two or three (sometimes, as on Loch Leven, four) flies on the cast with about three feet of gut between each.



Method of attaching dropper to cast.

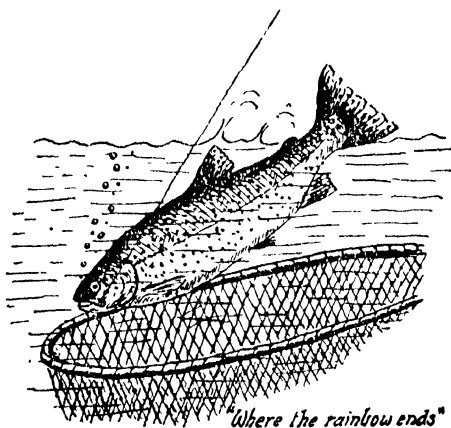
The boat is allowed to drift along the shallows and casts are made down wind, the rod point being gradually raised and the flies drawn gently towards the boat ; the tail fly fishes deepest, the middle one nearer the surface, and the top dropper should be drawn along the surface or close to it. If the drift has been long it is worth while putting out a minnow while rowing back for the next drift. Where there is a chance of a big fish trail slowly and deep with a spoon bait, a Reflet, or a natural bait on a spinning tackle. Ferox are generally cannibals and greater fighters.

A word about landing nets. Do not buy one of the all-too-common type in which the net itself tapers to a point at the bottom, for some day the constricted netting will offer just sufficient resistance for the fish to get that little extra leverage to break away at the

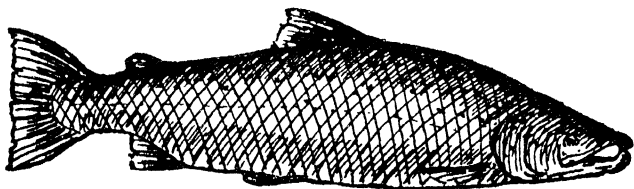


FEROX.

last moment. The net should be shaped like a sack, with straight sides. In landing a trout first submerge the net and then draw the fish into it.



VII.—SUMMER SALMON



IN most rivers it is much more difficult to catch salmon in summer than in spring. One reason is that the fish have usually been in the river for some time, having run up in the spring, and have either lost appetite or gained cunning ; they have lost also in general condition and in appearance. Where there is a summer run of fresh fish from the sea the difficulty of catching them is no greater than in the spring, and by the same methods ; but with the normally lower and clearer water of the summer months, there must be a definite change of tactics in approaching the fish, and after the end of April the fly will generally be more successful than the spinning bait.

It is a curious thing, however, that in rivers where fly only is allowed, the salmon seem to have a marked aversion from it and would seemingly much prefer a prawn or other bait !

Fly fishing for salmon can be divided into three main styles, with variations of each.

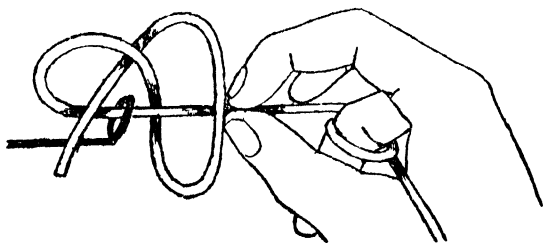
I. The orthodox method of casting across and down stream, letting the current bring the line and fly round without any guidance or interference on your part. At the completion of its journey the fly is allowed to hang for a little ; then a few yards of line are pulled in by hand ready for the next cast, which should be in the same direction but a foot or two lower down the river.

II. Fishing fast, *i.e.*, casting more across the stream and holding the rod more or less at right angles to it so that the fly comes round quickly and near the surface. In slow streams this journey of the fly is accelerated by pulling in the line by hand above the reel—the object being to tempt the fish to rush at the fly as it appears to be escaping. The exponents of this method say that if you do not see the fish come at your fly you are fishing too deep.

III. Small fly and greased line. This extraordinarily successful method of taking salmon, even in the very lowest conditions of water, has been brought nearly to perfection on the Aberdeenshire Dee, where it was first practised seriously by Mr. A. H. E. Wood at Cairnton and subsequently followed by a great many fishermen who have watched Mr. Wood's masterly and seemingly uncanny methods, or have profited by his expositions in *Fisherman's Pie* and in the salmon volume of the Lonsdale Library. Briefly, the principle of this method is so to cast and control

the line that the fly will come down stream and round to the bank *just awash* and without the least drag of interference by reason of its being attached to gut and line. The floating line makes this possible because its course can be controlled on the surface, so that eddies and currents may not divert the fly from the course a natural fly would pursue. The floating line can be lifted from a fast current between the fisherman and the fly, and bellied upstream to allow for the extra pace ; or more line can be paid out on the surface to counteract any tendency to drag the fly. The greasing of the line, however, must be very thoroughly done, as its virtue lies in making the line float properly ; on hot days the greasing may have to be repeated two or three times. Small flies only should be used, and the plainer and lighter they are dressed the better. The Blue Charm accounts for more fish than any other pattern at Cairnton, the home of the greased line and small fly, but the nearer the fly comes in the course of usage to resembling a bare hook the more killing it appears to be. That Mr. Wood's Blue Charm has more charm than blue about it is the conclusion we have come to after watching him fish on many occasions. To fish small flies on fine gut it is necessary to have a light line and a rod that will cast it properly ; to fish with fine gut on a big strong rod is to invite disaster. A single-handed 12-ft. rod, if it is light and properly balanced, will suffice for most rivers ; but if a double-handed rod is preferred a light 14-ft. or 15-ft. one is the most convenient.

The strength of the gut cast to be used should be governed by three factors, viz., the condition of the water, the size of the fly and the strength of the rod. A big fly on a light cast, or a small fly on a thick cast are bad combinations and will not yield the best results. There is no dividing line between salmon and trout gut (or for that matter between salmon and trout flies), but for flies of 1-in. size and smaller the



Attaching gut cast to salmon fly.

gut cast should taper to $\cdot 012$ in. next the fly. For medium size flies $\cdot 014$ in., if the gut is good, will suffice, and $\cdot 016$ in. should be used only with larger flies. If the fisherman has exceptionally good "hands" he can use even finer sizes with safety, and as salmon can see gut as well as any other fish can the finer one fishes the better are the chances of sport.

There are hundreds of different patterns of flies and probably all of them will kill fish if tried sufficiently; it is worse than useless to be dogmatic about anything pertaining to salmon fishing. Some fishermen are fastidious about shades of colour in the fibres

of the fly and think that unless a Jock Scott, say, is dressed exactly in every detail to their conception of the pattern it will not kill fish. Others, and you hear this more frequently, declare that it is the size of the fly that matters and not the pattern. Here personal experience is apt to upset theory, for we have killed a fish on the Awe on a hot day in June in shallow water when the river was dead low, on a 3-inch Mar Lodge. (It is worth while trying a large fly late on a hot day if the air temperature falls below that of the water, for the fish will be lying deeper.)

The only safe rule about the choice of a fly is that the best fly is that which is longest on the water, and the next best that in which you have most faith. Use the fly *you* think is most likely to tempt a fish and persevere with it—none of the others in your box is nearly so good.

When salmon won't look at a fly, however, the best thing to try is a shrimp or prawn. Baby prawns are often called shrimps, so the only real difference is in size. To get the greatest amount of pleasure out of prawn fishing in summer one should use the very lightest of tackle on an Illingworth or Helical reel; spinning the prawn by means of a celluloid-flanged tackle, or a celluloid jacket, and a very small amount of lead.

Another very deadly way of using a small prawn is to mount it on a single hook, and let it trip down stream on or near the bottom. A fly rod does quite well for this work, as little or no lead is necessary.

Thread the prawn on to the hook as shown here and bind it with a little fine wire or silk. Swing the prawn out into the stream as far as you can and, while holding the rod across the stream, pay out line gradually, a few inches at a time, so long as you can feel that it is working down stream. If you think from the feel of it that the prawn has got into an eddy, or its progress has been checked, then reel in and start again. Keep



in touch all the time and strike on the first suggestion of an obstacle. It may be a snag, but it may be a fish ; one never knows and it is worth while risking the loss of a hook by striking at once. The hooks must be very carefully and smoothly tied to thoroughly sound fine salmon gut, and they should be kept quite sharp by an occasional touch with a small piece of carborundum or a small fine file.

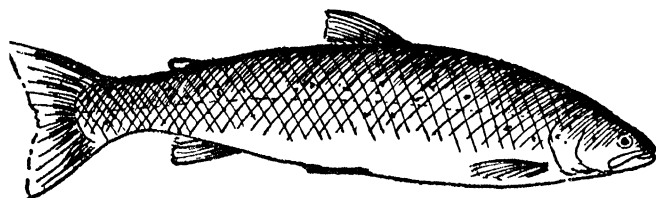
Dry Fly Fishing for salmon has often been tried and has proved successful here and there in exceptional circumstances such as a very warm summer evening when the fish can be seen lying behind a rock in comparatively shallow water, or moving about and occasionally rising at something—a May fly, a Sedge or an Alder. The late Major J. R. Fraser was induced

to try dry fly on the Test in 1906 when he observed salmon repeatedly taking May flies. Being a skilful fly-dresser he was able to fashion natural-looking flies, embodying some of the characteristics of standard salmon-fly patterns, on hooks strong enough for large fish. The first attempts were disastrous because of the inadequacy of his trout tackle to hold heavy Test salmon, but afterwards with stronger casts and longer line he succeeded in landing a number of good fish, not only in the Test but in Scottish and Irish rivers.

Although scarcely worth considering as a normal method of salmon fishing, there are occasions when a fish can be tempted to take a big floating fly fished in the same way as for trout; should you succeed in getting a rise do not pull the fly away from him by striking too soon because it is more difficult for a fish to suck down a fly attached to gut than a natural one—a circumstance that is often overlooked and leads to complaints of “short-rising.” When conditions of weather and water seem to render all ordinary methods of fishing useless it is better to try a dry fly than merely to content yourself with thinking of what you will do when a spate comes.

Although coupled with salmon for convenience here we do not hold that the sea-trout is a relative of that fish, but rather that it is a trout which spawns in fresh water and grows and develops in the sea. Unfortunately for the sea-trout it is classed with salmon in Acts of Parliament affecting the latter fish, as these Acts embrace sea-trout and other migrating fish of the salmon kind.

It is known by many different names, some of them local and some suggesting that it is a distinct species : White trout, Grey trout, Finnock, Peel, Sewin, Herling,



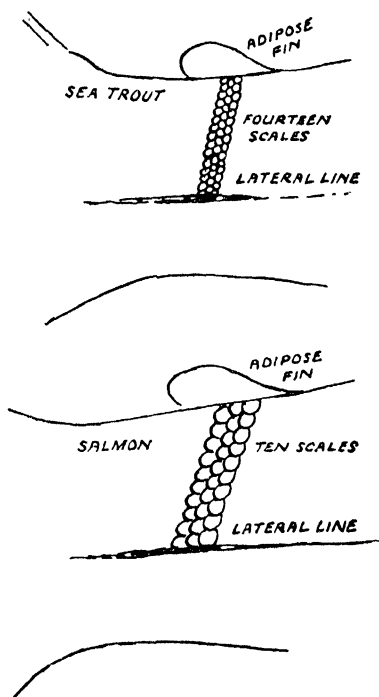
SEA TROUT.

Whitling, etc. ; but as none of these fish differs structurally from the trout it is probable that the variations in appearance and habits indicate separate races and varieties rather than separate species.

There is no difference between a yearling brown trout and a sea-trout of the same age, but the latter fish assumes a silvery coating on its migration to the sea as a smolt and is then much more like a young salmon in appearance. The small sea-trout known as whitling in Scotland are the grilse stage of the fish, having spent one winter in the sea.

Large sea-trout and small salmon are difficult to distinguish at a glance, but there is one quite definite method of making sure which is which, *viz.*, by counting the scales in a diagonal direction from the lateral line to the base of the adipose fin. The salmon has from 10 to 12 scales, the sea-trout not less than 14. Closer

examination of the individual scales would reveal the greater age of the sea-trout for its size.



As a sporting fish the sea-trout ranks high, and it has in recent years received a great deal of the attention it deserves from scientific investigators and angling writers.

It has been artificially introduced into some rivers

with considerable success, and these experiments might be copied in many other rivers to the great advantage of anglers whose only chance of sport lies in the estuaries and tidal waters.

A few years ago a pioneer sea-trout was found in one of the London dock basins, striving to get a little oxygen from the fresh water trickling from a leaky hydrant ; this fish had probably come up the river feeding on the herring fry (whitebait) and had roamed on into water in which it could not breathe.

Sea-trout feed in fresh water and can be caught on any bait and tackle that one uses for trout ; they can be caught also in the sea, and we have taken good fish on mussels when fishing from a pier in the north of Arran on the West Coast of Scotland.

In estuaries and tidal waters where there is not much current the sea-trout appear to keep in shoals in the deeper holes, and then they can best be taken with worm or a small spinning bait ; our preference is for the latter, and we have had good sport with a small (1-in. to 1½-in.) Reflet bait mounted with one treble hook only, because sea-trout fight hard and one hook of good size is preferable in every way to several small ones ; this applies to fishing with a worm, and a single hook (about size 6 to 8) is to be preferred to two- or three-hook tackles with small hooks.

In fly fishing for sea-trout it should be realised to begin with that these fish are the most wary and shy of all the *salmo* family ; they must be approached with great caution and with delicate tackle. The rod used

for brown trout will do equally well for sea-trout, but the latter are amongst the most difficult of fly-taking fish to play, on account of the pace at which they fight and their habit of jumping repeatedly when hooked ; it is well, therefore, to have a good reserve of fine backing neatly spliced to the line in case of need. Casting may be either up stream or down, according to circumstances and taste ; the former is preferable in so far that as the fish lie head-on to the current they are less likely to see the angler approaching ; but apart from that it is generally better to fish down stream as then the fly has a chance of being seen by the fish before the gut and line come over him. Vary your style of fishing out the cast ; sometimes it is best to sink your fly deeply, at others to keep it near the surface. Be on the alert even when pulling in a yard or two of line for the next cast, as sea-trout will sometimes follow the fly and take it as it is being drawn up or across the stream.

When the fish are lying in deepish water and not showing themselves a dry fly floating over their heads will often succeed where the sunk fly fails ; this can be done also casting down stream, especially if you have seen a fish rise, and there are variations from the orthodox, such as dragging the fly over the surface of the water, which will sometimes yield happy surprises.

The choice of flies is not so great as for brown trout, because one has not to consider so much what particular insect is hatching at the time. Where sea-trout are there is generally also a chance of a grilse or

salmon and we have found it pay to have a small salmon fly (a tiny Silver Doctor or a Dusty Miller) on the tail and, say, a Peter Ross or Black Pennell as dropper about four feet higher up the cast. Other good flies are Claret and Mallard, Teal and Green, Grouse and Claret, Golden Olive, Butcher, Invicta, Silver Blue, Black Zulu, Blue Zulu, etc.

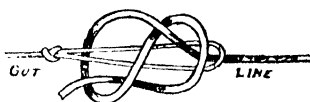
For dry fly patterns a largish Olive Quill or Red Quill (the latter preferably hackled), Coch-y-bondhu, Wickham's Fancy, Blue Upright, Cairn's Fancy or other good floaters.

Night fishing for sea-trout is generally looked upon as a chuck-and-chance-it business, with large flies, stout gut and the prospects of finding after much fruitless casting that the fly is securely fastened in your own clothes. But practised seriously it requires even more skill and wariness than day fishing, and at least as fine tackle.

In very hot weather when the river is low sea-trout congregate at dusk in the shallow water at the tail of the pool where the water cools quickest and the supply of oxygen is greatest; these are the places to try, but keep away from such spots until all daylight has gone or else the fish will become very shy and hard to get. Earlier in the evening the best places are the stickles and fast water at the head of the pools, places where a salmon also is very likely to lie.

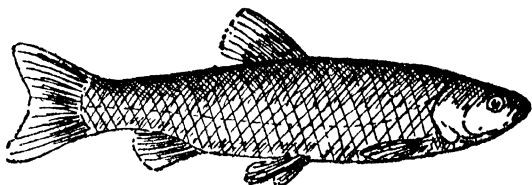
Use smallish flies (10 to 12) and fine gut, keeping them near the surface by stripping in the line gently but steadily with the free hand as soon as the flies

light on the water. Dark flies are more easily seen at dusk than light ones, and flies like the Alexandra or Butcher which have silver bodies catch and reflect the faint rays of light attractively. There are also many varieties of so-called "lures," often consisting of two or three hooks tied worm-tackle fashion, with silvered bodies and long strip wings of peacock, pin-tail, mallard, etc., which are favoured and found killing in certain localities.



Attaching gut cast to line.

VIII.—CHUB, DACE, BREAM, RUDD AND OTHER COARSE FISH



CHUB.

THE chub deserves to be considered as a link between the " game " and " coarse " fish, as it has many of the qualities of the former and all the best characteristics of the latter. Even the fly-only fisherman may respect the chub, as it will frequently take a fly, and sometimes keep it—permanently as far as you are concerned.

As a sporting fish the chub has few equals amongst the coarse fish ; it is big, strong and much more intelligent than it looks. It can see you through the thickest tree-trunk behind which you are hiding, and fade away as soon as you think you have successfully stalked it ; or if you have got over the stalking difficulties, hooked the fish and momentarily lost your nerve, it will apparently quite deliberately try to

get round a snag and break your tackle at its leisure.

Chub are found only in running water, and sometimes grow to quite a large size ; the record fish taken on rod and line weighed 8 lbs. 4 ozs. and was from the Hampshire Avon, while fish of 3, 4 and 5 lbs. are common in rivers such as the Wye. They are gregarious and on a hot summer day, when trout are off and grayling not yet on, it is a tantalising sight to see half a dozen or so big stately chub moving about near the bank utterly disdaining to notice all your lures. On other days if things go well you can have first-rate sport with a fly rod, using slightly stouter gut than for trout and larger flies—Black or Red Palmers, Coachman, Alder, Sedge, etc.

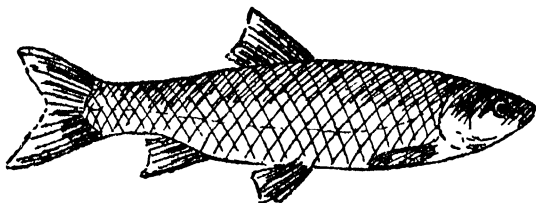
The close season for chub, as for other coarse fish, is from March 15th to June 15th. When young they are silvery in colour, gradually darkening to copper as they grow.

Almost any kind of ground bait will attract chub, and the best hook baits are wasp grub, cheese paste, gentles, flies, worms and small frogs. In winter the bait should be adjusted to fish near the bottom, but in summer the fish lie higher up, in mid-water or even higher. As the chub likes a biggish bait there is scope for considerable variety ; a cherry or a small potato will sometimes tempt a good fish.

Ledgering on the bottom (see chapter on Roach) is a restful but rather dull proceeding favoured by some fishermen and often resulting in good catches.

If you are a good stalker try dapping a natural fly or insect over bushes where chub lie ; only make sure your tackle is strong enough to hold the fish if you hook it. A keen fisherman told us recently that for the purpose of dapping you can stick a fly to the hook with bird-lime, rather than impale it, but we have not had an opportunity of trying this.

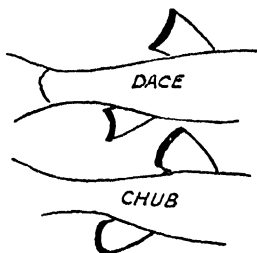
Chub can be cooked in the same manner as roach or pike. We have seen a recipe which recommends baking the fish on a soft wooden board and then, when ready, throwing away the fish and eating the wood !!!



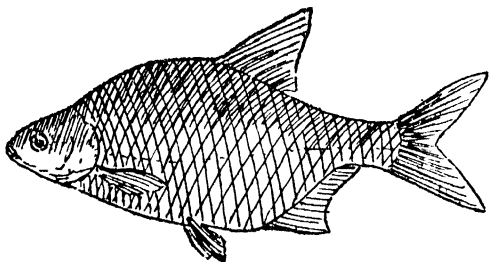
DACE.

In appearance dace are very similar to chub, but there are some differences which the illustration makes clear, especially in the shape of the fins.

The dace has been called the poor man's trout, because it is often found in rivers of easy access to all, such as the lower reaches of the Thames.



We have caught dace on fly on the shallows above Kew bridge, and found them extraordinarily quick and difficult to hook. Very small flies of the Black Gnat type are best, and as the fish are gregarious and free risers they afford capital sport in suitable conditions. Although generally weighing only a few ounces they sometimes grow to over a pound in weight. We once took a 15½-oz. dace on May fly in the Lambourne, having in our inexperience of large dace mistaken this one for a good trout rising steadily on a June evening.



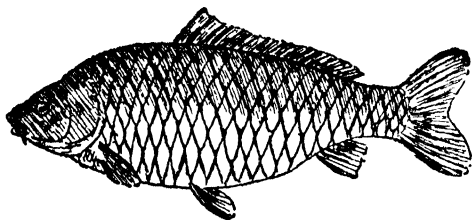
BREAM.

Float fishing for dace should be practised with the very finest possible tackle, as anything else would be ridiculous for such a small fish. The best baits are gentles, breadcrust, paste, small worms, etc. Hooks 14 to 16 (see Roach article for sizes).

In contrast to dace, bream prefer deep sluggish or even still water, and are only taken on or close to the bottom. The bream is deep in shape, flattened from side to side, with forked tail and large, rather slimy,

scales. Someone has described the bream as being in shape something like a pair of bellows, the head forming the handles and the tail the spout ; to which a wag added that it also tasted very much like a pair of stewed bellows ! There is, however, a substantial market for bream, so there must be a palatable way of preparing it for the table.

Bream can be caught most easily at night or early in the morning, the best baits being paste, worms,



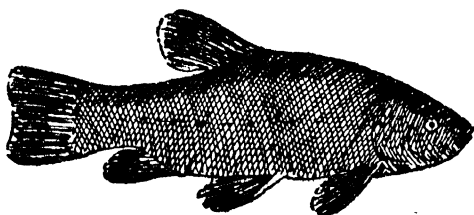
CARP

gentles, or boiled wheat—in good lumps on fair-sized hooks.

There are several varieties of bream in English waters, and often in large numbers, but it is not one of the widely distributed members of the carp family.

About the common carp we feel inclined to say here only that it is the most difficult of all fresh-water fish to catch. Fishing for large carp demands so great an amount of care and patience that the beginner will be well advised to make himself a master of the art of

catching other fish before matching himself against this most wily adversary. An old writer recommends this method : After trying many experiments without success, sink an old boat with small deck for three months and then raise it ; you will find in it plenty of large carp and eels, but not small ones as these will not enter the boat.



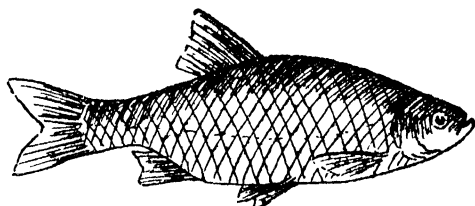
TENCH.

The tench is shy, but not as shy as the carp. It is often referred to as the Doctor amongst fresh-water fishes, on account of some supposed healing property in the coating of slime that covers its very small scales, but there is no real basis for the superstition.

The colour of the tench is a dull olive green with dark-brown back, and it lives in deep sluggish water with muddy bottom in which the fish lie, partly buried, during the winter. The record tench weighed 7 lbs. and was taken at Pottery Pits, Weston-super-Mare ; this is, however, a very exceptional tench because anything over 2 lbs. is a good one. They take best at night and during the hot months of the season. Tackle should be similar to that used for roach, but rather

stronger, for the tench is a powerful fighter and haunts weedy places. The best bait is a lob-worm, though roach baits will take some fish.

In appearance rudd are similar to roach but have the fins differently placed—see illustration in the chapter on Roach.



RUDD.

Rudd are found in large numbers in some rivers and lakes, especially in weed beds, along the edges of which they can be caught readily on artificial trout flies. A bright fly such as Wickham's Fancy, Red Tag, or Coachman will tempt the rudd out of the weeds with its characteristic V-shaped motion of the water as it swims just under the surface. It can also be taken on ordinary float tackle, with small worm.

The necessity of keeping this volume within small limits has prevented our dealing with other fresh-water fish and has permitted only the preceding short references to some well-known varieties, but enough has been written, we trust, to justify the aim of the book to assist young fishermen and beginners at the sport.

ADDITIONAL OBSERVATIONS
AND PERSONAL PREDILECTIONS

